

Manufacturers of World Class Discrete Semiconductors

PNP SILICON DARLINGTON TRANSISTORS

JEDEC TO-92 CASE (EBC)

The CENTRAL SEMICONDUCTOR MPSA62 series types are molded epoxy silicon PNP transistors manufactured by the epitaxial planar process designed for extremely high gain applications.

	SYMBOL	MPSA62	MPSA63	MPSA64	MPSA65	MPSA66	UNIT
Collector-Base Voltage	V _{CB0}	20	30	30	30	30	V
Collector-Emitter Voltage	V _{CES}	20	30	30	30	30	V
Emitter-Base Voltage	V _{EB0}	10	10	10	8.0	8.0	V
Collector Current	I _C			500			mA
Power Dissipation	P _D			625			mW
Power Dissipation (T _C =25°C)	P _D			1.5			W
Operating and Storage							
Junction Temperature	T _J , T _{STG}			-65 to +150			°C
Thermal Resistance	θ _{JA}			200			°C/W
Thermal Resistance	θ _{JC}			83.3			°C/W

SYMBOL	TEST CONDITIONS	I _C =10μA		I _C =10mA		I _C =10mA		I _C =10mA		I _C =10mA		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
I _{CB0}	V _{CB} =15V		100		-		-		-		-	nA
I _{CB0}	V _{CB} =30V		-		100		100		100		100	nA
I _{EB0}	V _{BE} =10V		100		100		100		-		-	nA
I _{EB0}	V _{BE} =8.0V		-		-		-		100		100	nA
BV _{CES}	I _C =100μA	20		30		30		30		30		V
V _{CE} (SAT)	I _C =10mA, I _B =0.01mA		1.0		-		-		-		-	V
V _{CE} (SAT)	I _C =100mA, I _B =0.1mA		-		1.5		1.5		1.5		1.5	V
V _{BE} (ON)	V _{CE} =5.0V, I _C =10mA		1.4		-		-		-		-	V
V _{BE} (ON)	V _{CE} =5.0V, I _C =100mA		-		2.0		2.0		2.0		2.0	V
h _{FE}	V _{CE} =5.0V, I _C =10mA	20k		5k		10k		50k		75k		
h _{FE}	V _{CE} =5.0V, I _C =100mA	-		10k		20k		20k		40k		
f _T	V _{CE} =5.0V, I _C =100mA, f=100MHz	-		125		125		-		-		MHz
f _T	V _{CE} =10V, I _C =30mA, f=50MHz	-		-		-		100		100		MHz
C _{Ob}	V _{CB} =10V, I _E =0, f=100kHz	2.5	TYP	2.5	TYP	2.5	TYP	2.5	TYP	2.5	TYP	pF
NF	V _{CE} =5.0V, I _C =1.0mA, R _S =100kΩ, f=1.0kHz	2.0	TYP	2.0	TYP	2.0	TYP	2.0	TYP	2.0	TYP	dB